

AMENDMENTS TO THE CLAIMS

Please amend the claims. The following listing of claims replaces all previous versions in the Application:

What is claimed is:

1 – 44. (Canceled)

45. (Currently Amended) A system for allocating resources to service requests comprising:

a service index block having a plurality of super group indexes, the service index block being coupled to receive a first service index corresponding to a service request and configured to provide a first super group index in response to the first service index;

a super group block having a plurality of server resource group indexes, the super group block being coupled to receive the first super group index and configured to provide a first resource group index in response to the first super group index;

a group block having a plurality of resource indexes, the group block being coupled to receive the first resource group index and configured to provide at least one resource index in response to the first resource group index, each resource index corresponding to one of a plurality of resources.

46. (Previously Presented) The system of **Claim 45** wherein the at least one resource index is one resource index, the one resource index indicating a resource assigned to the service request.

47. (Previously Presented) The system of **Claim 46** wherein the resource is a server.

48. (Previously Presented) The system of **Claim 45** wherein the service index block further comprises a plurality of load balancing policy indexes, the service index block further configured to provide a first load balancing policy index in response to the first service index, the system further comprising a first load balancer coupled to receive the at least one resource index and the first load balancing policy index, select a first load balancing policy from among a plurality of load balancing policies based on the first load balancing policy index, and apply the first load balancing policy to the at least one resource index to select a resource.

49. (Previously Presented) The system of **Claim 48** wherein the system further comprises a second load balancer, the super group block further configured to generate at least one additional resource group index in response to the first super group index, the second load balancer configured to select the first resource group index from among the first resource group index and the at least one additional resource group index based on a second load balancing policy.

50. (Previously Presented) The system of **Claim 49** wherein the second load balancing policy is selected based on the first load balancing policy index.

51. (Previously Presented) The system of **Claim 49** wherein the second load balancing policy is configured independently of the first load balancing policy index.

52. (Previously Presented) The system of **Claim 45** further comprising a content analysis engine configured to receive at least a portion of a data packet and generate a service index based on at least one of domain name and URL pattern matching.

53. (Previously Presented) The system of **Claim 45** further comprising a lookup table coupled to receive at least a portion of a data packet and configured to lookup the first service index based on at least one of a destination IP, a destination port and a protocol corresponding to the data packet.

54. (Previously Presented) The system of **Claim 45** further comprising a history table configured to receive the first service index and select a second resource index based on a persistence policy if a match is found in the history table.

55. (Previously Presented) The system of **Claim 45** wherein the group block comprises a hierarchical data structure using the first resource group index to produce the at least one resource index, the hierarchical data structure comprising a plurality of tables each accessed in sequence, an output of each table being an input to the next table in the sequence, the first sequential table of the plurality of tables being configured to receive the first resource group index and the last sequential table of the plurality of tables being configured to provide the at least one resource index.

56. (Previously Presented) A method for allocating resources to service requests comprising:

receiving a first service index corresponding to a service request;
generating a first super group index in response to the first service index;
generating a first resource group index in response to the first super group index;
and
generating at least one resource index in response to the first resource group index, the at least one resource index corresponding to at least one of a plurality of resources.

57. (Previously Presented) The method of **Claim 56** further comprising the step of assigning a resource to the service request, wherein the at least one resource index is one resource index, the one resource index indicating the resource.

58. (Previously Presented) The method of **Claim 57** wherein the resource is a server.

59. (Previously Presented) The method of **Claim 57** further comprising:

- generating a first load balancing policy index in response to the first service index;
- selecting a first load balancing policy from among a plurality of load balancing policies based on the first load balancing policy index; and
- applying the first load balancing policy to the at least one resource index to select a resource.

60. (Previously Presented) The method of **Claim 59** further comprising:

- generating at least one additional resource group index in response to the first super group index; and
- applying a second load balancing policy to the first resource group index and the at least one additional resource group index to select the first resource group index.

61. (Previously Presented) The method of **Claim 60** further comprising selecting the second load balancing policy based on the first load balancing policy index.

62. (Previously Presented) The method of **Claim 60** further comprising selecting the second load balancing policy independently of the first load balancing policy index.

63. (Previously Presented) The method of **Claim 56** further comprising:

- receiving at least a portion of a data packet having a domain name and a URL;
- and
- generating a service index based on the domain name and pattern matching of within the URL.

64. (Previously Presented) The method of **Claim 56** further comprising:

- receiving at least a portion of a data packet having a destination IP, a destination port and a protocol; and
- generating a service index based on at least one of the destination IP, the destination port and the protocol.

65. (Previously Presented) The method of **Claim 56** further comprising selecting a second server based on a persistence policy if a match is found in a history table.

66. (Previously Presented) The method of **Claim 65** wherein the steps of generating the first super group index, generating a first group index and generating a first server being performed only if a match is not found in the history table.

67. (Previously Presented) The system of **Claim 45** wherein generating at least one resource index in response to the first resource group index comprises accessing a plurality of tables in sequence, the first sequential table of the plurality of tables receiving the first resource group index, each of the plurality of tables providing an input to the next table in the sequence, and the last sequential table of the plurality of tables providing the at least one resource index.